

1 I claim:

- 2 1. A manual braking system for wheels of a wheelchair comprising:
- 3 caliper type brakes mountable to said wheelchair;
- 4 a manual brake actuator mountable to said wheelchair;
- 5 a braking cable connected from said caliper type brakes to said manual braking
- 6 actuator over a pulley, said being a pulley mountable on said wheelchair and providing
- 7 substantially equal force on each of said caliper type brakes.
- 8 2. The manual braking system for wheels of a wheelchair as recited in Claim 1 wherein the
- 9 axis of said pulley is displacable.
- 10 3. The manual braking system for wheels of a wheelchair as recited in Claim 1 further
- 11 comprising disks mountable to said wheels of said wheelchair, whereby said caliper type
- 12 brakes are positioned to exert a braking force on said disks.
- 13 4. The manual braking system for wheels of a wheelchair as recited in Claim 3 wherein
- 14 said manual brake actuator provides a variable braking force to said pulley.
- 15 5. The manual braking system for wheels of a wheelchair as recited in Claim 4 wherein
- 16 said manual brake actuator is a lever pivotally mounted to said wheelchair.
- 17 6. The manual braking system for wheels of a wheelchair as recited in Claim 5 further
- 18 comprising:
- 19 a linking element connected to both said pulley and said lever and causing said pulley to

1 displace when said lever is rotated.

2 7. The manual braking system for wheels of a wheelchair as recited in Claim 6 further
3 comprising:

4 a mounting bracket fixedly mounted to said wheelchair, said lever being pivotally
5 mounted to said mounting bracket;

6 a guiding slot in said mounting bracket;

7 an elongated mounting element extendable through said guiding slot, said pulley, and
8 with said linking element, said mounting element being slidable within said guiding slot and said
9 pulley and said linking element being rotatable thereon.

10 8. The manual braking system for wheels of a wheelchair as recited in Claim 7 wherein
11 said variable braking force is incremental.

12 9. The manual braking system for wheels of a wheelchair as recited in Claim 8 further
13 comprising an adjustable locking means for said lever arm for providing said incremental
14 braking force.

15 10. The manual braking system for wheels of a wheelchair as recited in Claim 9 wherein
16 said adjustable locking means comprises:

17 a plurality of notches radially spaced around a pivot point of said lever arm;

18 a plunger mountable to said mounting bracket, said plunger being insertable into said
19 notches to lock said lever arm in a rotation position.

1 11. A wheelchair having a manual braking system comprising:

2 a frame;

3 a seat having a bottom portion and back portion mounting within said frame;

4 wheels rotatably mounted on said frame;

5 caliper type brakes on each of said wheels;

6 braking cable connectable from said caliper type brakes to a manual brake actuator
7 mounted over a pulley on said frame;

8 said pulley providing substantially equal force on each of said caliper type brakes;

9 12. The wheelchair having a manual braking system as recited in Claim 11 further
10 comprising of disk mountable adjacent said wheels and rotatable therewith wherein said caliper
11 type brakes are positioned to exert a braking force on said disks.

12 13 A wheelchair having a manual braking system as recited in Claim 11 wherein said
13 manual actuator provides a variable braking force to said pulley.

14 14. The manual wheelchair having a manual braking system as recited in Claim 13 wherein
15 said manual brake actuator is a lever.

16 15. The manual wheelchair having a manual braking system as recited in Claim 14 further
17 comprising a linking element pivotally connected to both said pulley and said lever causing said
18 pulley to displace when said lever arm is rotated.

1 16. The manual wheelchair having a manual braking system as recited in Claim 15 further
2 comprising:

3 a mounting bracket fixedly mounted to said frame, said lever being pivotally mounted to
4 said mounting bracket;

5 a guiding slot in said mounting bracket;

6 an elongated mounting element extendable through said guiding slot, said pulley, and
7 said linking element, said mounting element being slidable within said guiding slot, and with said
8 pulley and said linking element being rotatable thereon.

9 17. A manual wheelchair having a manual braking system as recited in Claim 16 wherein
10 said mounting element is a screw.

11 18. A wheelchair having a manual braking system as recited in Claim 17 wherein said
12 variable braking force is incremental.

13 19. A wheelchair having a manual braking system as recited in Claim 18 further comprising:

14 an adjustable locking means for said lever arm for providing said incremental braking
15 force.

1 20. A wheelchair having a manual braking system as recited in Claim 19 wherein said
2 adjustable locking means comprises:

3 a plurality of notches radially spaced around a pivot point of said lever arm;

4 a plunger mountable to said mounting bracket, said plunger being insertable into said
5 notches to lock said lever arm in a rotated position.
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